

ABSTRACT

The present invention is a space efficient container-forming machine having an optional pre-formation dunnage removal and staging section, an apparatus for forming the bodies of multi-sided containers from flat single-sheet paperboard blanks that assures proper alignment of the leading and trailing edges of the container blank before adhering the first and last body panels of the blank together, an apparatus for altering the path of the partially-formed container bodies while rotating the bodies themselves to a selected angle or position, and a final formation section where the bottom panels of the container are folded and adhered together. In a preferred embodiment, the alignment apparatus is located above the dunnage removal and staging section, and path of container formation inside the machine doubles back against itself in a U-turn (180 degrees), thereby reducing the overall footprint of the machine. During the U-turn, the partially-formed container is positioned for further formation activity by rotating the container itself only 90 degrees. The machine is generally designed for use with containers having more than four sides, but may be adapted for use in forming 4-sided as well as RSC containers.